

JAN 11 2007

**PATENT**  
Attorney Docket No. UCSD-04742**REMARKS**

Claims 1-33 and 47-101 are currently pending. In the instant Final Office Action, the Examiner has withdrawn Claims 1-33, 47-87 and 97-101 from consideration. In addition the Examiner has raised several issues, which are set forth by number in the order they are addressed herein:

- 1) Claims 88-96 stand rejected under 35 U.S.C. § 112 first paragraph, as allegedly failing to comply with the written description requirement;
- 2) Claims 88-96 stand rejected under 35 U.S.C. § 112 first paragraph, as allegedly containing new matter; and
- 3) Claims 88-96 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Applicants thank the Examiner for withdrawal of several of the rejections from the prior Office Action. Nonetheless Applicants hereby amend Claim 88, cancel Claims 1-33, 59-87, 93 and 96-101, and introduce new Claims 102-104, in order to further the prosecution of the present application and Applicants' business interests, without acquiescing to the Examiner's arguments, and while reserving the right to prosecute the original, similar, or broader claims in one or more future application(s). Also as requested by the Examiner, Applicants have deleted a hyperlink from the definitions section of the application as filed. These amendments do not introduce new matter.

**1) The Claims Meet The Written Description Requirement**

The Examiner has rejected Claims 88-96 under 35 U.S.C. § 112 first paragraph, as allegedly failing to comply with the written description requirement. In particular the Examiner states that the

written description in this case sets forth the specifically recited amino acids of SEQ ID NO:1, therefore the written description is not commensurate in scope with the claims drawn to sequences having greater than 60% sequence identity. The specification does not include structural examples of sequence having greater than 60% sequence identity to amino acids 1 to 357 of SEQ ID NO:1.

**PATENT**  
**Attorney Docket No. UCSD-04742**

Furthermore, the specification lacks a sufficient number of representatives, which the Courts have indicated as necessary to adequately describe broad generic claims (Final Office Action, pages 9 and 10).

Although Applicants respectfully disagree with this rejection, Applicants have amended Claim 88 and introduced new Claims 102-104, in order to further the prosecution of the present application and Applicants' business interests, yet without acquiescing to the Examiner's arguments, and while reserving the right to prosecute the original, similar or broader claims in one or more future application(s). Specifically, Applicants have amended Claim 88 to recite "wherein said biologically active TL- $\gamma$  comprises amino acids 1 through 357 of SEQ ID NO:1". Support for the pending claims can be found in, but is not limited to, Section IV of the description directed to assays for modulators of TL- $\gamma$ . For instance, Applicants teach that the biological "activity of TL- $\gamma$  can be assessed using a variety of *in vitro* or *in vivo* assays, e.g., microtubule gliding assays (*see* Example II), binding assays such as microtubule binding assays, microtubule polymerization assays and ATP assays" (Specification, page 42, lines 25-31).

Additionally, Applicants have introduced new Claims 102-104 directed to methods comprising additional TL- $\gamma$  fragments (e.g., comprising amino acids 1 to 442 of SEQ ID NO:1, 1 to 601 of SEQ ID NO:1, and full-length TL- $\gamma$  / 1 to 784 of SEQ ID NO:1, respectively). Support for the new claims can be found, for example, in the teaching that the "predicted structure of TL- $\gamma$  consists of an amino-terminal, kinesin-like microtubule 'motor' domain (approximately amino acids 1-357 of TL- $\gamma$ ); a 'neck' domain (approximately amino acids 358-442 of TL- $\gamma$ ) that links the motor to the 'stalk' domain, which is the unc-104 family domain (approximately amino acids 443-601 of TL- $\gamma$ ); and a 'tail' domain (approximately amino acids 602 to the C-terminal end of TL- $\gamma$ )" (Specification, page 9, lines 6-11). Applicants believe that it is proper to introduce new dependent Claims 102-104 at this time because these claims are narrower in scope than Claim 88 upon which they ultimately depend, and because Applicants have simultaneously canceled multiple previously presented claims.

As the amended claims meet the written description requirement, Applicants respectfully request that this rejection be withdrawn.

**PATENT**

Attorney Docket No. UCSD-04742

**2) The Claims Find Support In The Application As Filed**

The Examiner has rejected Claims 88-96 under 35 U.S.C. § 112 first paragraph, as allegedly failing to comply with the written description requirement. In particular the Examiner states that the

Applicant has pointed to pages 5-10 of the instant specification and claims for support of the amendment which are drawn [to] a biologically active TL- $\gamma$ , [which] comprises a motor domain wherein said motor domain sequences shares at least 60 % sequence identity with the sequence comprising amino acids 1 through 357 of SEQ ID NO:1 used in a method of screening for modulators of TL- $\gamma$ . However it appears that the entire specification appears to fail to recite support for the newly recited amendment (Final Office Action, page 12).

Although Applicants respectfully disagree with this rejection, Applicants have amended Claim 88 and introduced new Claims 102-104 as described above in Section 1. Specifically, Applicants have *deleted* the phrase “wherein said motor domain sequence shares at least sixty percent sequence identity” from Claim 88. Support for the pending claims can be found in, but is not limited to, original Claims 34-42 now canceled, and to the teaching of methods for screening for modulators of TL- $\gamma$ , wherein biologically-active TL- $\gamma$  comprises a motor [amino acids 1-357 of SEQ ID NO:1], stalk [amino acids 443-601 of SEQ ID NO:1], or tail [602-784 of SEQ ID NO:1] of *Thermomyces lamuginosus* TL- $\gamma$  [which in some embodiments corresponds to the] amino acid sequence of a TL- $\gamma$  motor domain of SEQ ID NO:1” (Specification, page 4, lines 20-32).

As the amended claims find support in the application as filed, Applicants respectfully request that this rejection be withdrawn.

**3) The Claims Are Definite**

The Examiner has rejected Claims 88-96 under 35 U.S.C. § 112 second paragraph, as allegedly indefinite for use of the terms “TL- $\gamma$ ” and “TL- $\gamma$  activity” in Claim 88, and “has identity to” in Claims 93 and 96 (Office Action, page 13). Although Applicants believe the claims as filed were definite, Applicants hereby amend Claim 88, and cancel Claims 93 and 96, in order to further the prosecution of the present application and Applicants' business interests, yet without acquiescing to the Examiner's arguments, and while reserving the right to prosecute the original, similar or broader claims in one or more future application(s). In particular,

JAN 11 2007

PATENT

Attorney Docket No. UCSD-04742

Applicants have amended Claim 88 to recite "*Thermomyces lanuginosus*- $\gamma$  (TL- $\gamma$ )" when used for the first time, and to recite "wherein the TL- $\gamma$  activity comprises one or more of microtubule gliding, microtubule binding, microtubule depolymerization and ATPase activity." Support for these amendments can be found as described in Sections 1 and 2 above.

As the amended claims are definite, Applicants respectfully request that this rejection be withdrawn.

### CONCLUSION

Applicants believe that the arguments and claim amendments set forth above traverse the Examiner's rejections and respectfully request that a timely Notice of Allowance be issued in this case. However, should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect.

Dated: January 11, 2007

By: \_\_\_\_\_



Christine A. Lekutis  
Registration No. 51,934

MEDLEN & CARROLL, LLP  
101 Howard Street, Suite 350  
San Francisco, California 94105  
415.904.6500